



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 05/27/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,053	12/22/2000	Steven M. Blumenau	E0295/7155	4482
. 75	90 05/27/2005		EXAM	INER
Richard F. Giunta c/o Wolf, Greenfield & Sacks, P.C.,			HO, THOMAS M	
Federal Reserve Plaza			ART UNIT	PAPER NUMBER
600 Atlantic Avenue			2134	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/748,053	BLUMENAU ET AL.			
Office Action Summary	Examiner	Art Unit			
	Thomas M. Ho	2134			
The MAILING DATE of this communication ap		<u>, l</u>			
A SHORTENED STATUTORY PERIOD FOR REPI THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reg - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	. 136(a). In no event, however, may a reply ply within the statutory minimum of thirty (30 d will apply and will expire SIX (6) MONTHS te, cause the application to become ABAND	be timely filed)) days will be considered timely. from the mailing date of this communication. ONED (35 U.S.C. § 133).			
Status	•				
1)⊠ Responsive to communication(s) filed on 09 i	February 2005.				
2a)⊠ This action is FINAL . 2b)□ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>1-66</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-66</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/	or election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12)☐ Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 11	9(a)-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the pri	ority documents have been rec	ceived in this National Stage			
application from the International Burea	au (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a lis	at of the certified copies not rec	eived.			
Attachment(s)					
1) Notice of References Cited (PTO-892)		mary (PTO-413)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		ail Date			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 3/30/05.	6) Other:	mal Patent Application (PTO-152)			
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office	Action Summary	Part of Paper No./Mail Date 5202005			

HL

Art Unit: 2134

DETAILED ACTION

- 1. The amendment of 2/9/05 has been received and entered.
- 2. Claims 1-66 are pending.

Response to Arguments

3. Applicant's arguments have been fully considered, but are unpersuasive.

The primary point of contention in Applicant's arguments appear to be that the Examiner's cited art, Hubis does not disclose a method of validating a physical connection, that is determining whether one of the plurality of devices is attempting to access the shared resource through a physical connection different than a first physical connection.

For Example, the Applicant's recites the following on page 28, paragraphs 2 & 3:

"In Hubis, the controller takes the information provided by the host and establishes associations in the appropriate data structures without ever determining whether that information is authentic or consistent. For example, the Hubis reference nowhere discusses any mechanism for preventing multiple entities in the Host ID Map from being established, such as by a host using the same WWN from different physical locations on the network. Hubis simply lacks any disclosure relating to ensuring that hosts do not spoof their identity. In particular, Hubis is completely silent with respect to determining

Art Unit: 2134

whether hosts that represent themselves with the same identity are attempting to access the storage device over different physical connections."

"The Office Action asserts that column 15, lines 50-52 discloses a method of checking the physical connection, where the access path qualifier is determined by the WWN and comparing it with the table entries." (Office Action, Page 3). However, the WWN is a device specific identifier that is independent of the location of the device on the network. That is, the WWN indicates nothing about the physical connection of the device and, therefore, is insufficient to validate a physical connection. The controller of Hubis compares a presented WWN with current entries in the Host WWN List, but does so merely to ascertain whether the host has previously logged in, not to verify a physical connection as the WWN alone does not carry this information. In particular, the search of the Host WWN List simply determines whether a Host Index for the host already exists or whether one needs to be generated. However, this table search does not relate to, nor can it verify, the physical connection of the device."

However, the Examiner contends that WWN comparison made by Hubis can verify the physical connection of the device. Whether or not Hubis discloses or prevents network identities from being spoofed is irrelevant, as such functionality is not claimed.

Hubis (Column 11, lines 45-57 and other citations of the rejection of claim 1) discloses that a determination is made with respect to a WWN, an LUN and a host to controller port combination. Specifically, these values are evaluated with respect to a particular

Art Unit: 2134

logical volume. The WWN, known as a World Wide Name is a unique identifier with vendor supplied information.

World Wide Name

From Wikipedia, the free encyclopedia.

A World Wide Name is a unique identifier in a Fibre Channel storage network.

Each WWN is a 16 byte number derived from an IEEE OUI (for the first 3 bytes) and vendor-supplied information (for the rest).

The Applicant has recited details regarding the WWN on page 8 of the specification:

"Each WWN is assigned by the manufacturer of the device as part of a registration process that is controlled by the IEEE. The WWN typically includes a number of fields, including a first that uniquely identifies the manufacturer of the device and/or HBA, and a second that distinguishes uniquely among the devices provided by that manufacturer."

Applicant further discloses on page 9:

"Since the WWN is intended to provide an identifier that is unique to any device anywhere in the world, it is quite lengthy.."

The Examiner contends that because the WWN can uniquely identify any device in the world, a different physical connection would necessarily have a device with a different WWN. For purposes of examination, the Examiner has interpreted that a different

Art Unit: 2134

"physical connection" as requiring the use of different devices or hardware. (see the rejection of 35 USC § 112)

Hubis explicitly discloses (Column 11, lines 45-57) the determination of the WWN combination with the LUN and host to controller information with respect to allowing access to a particular volume and as such discloses that a verification of the physical connection of the device.

Applicant's additional arguments are related to the objections of claim 1 and are considered address by the Examiner's response to claim 1.

Further arguments and discussion with respect to Applicant's arguments can be seen in the rejection under 35 USC § 112.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly

claiming the subject matter which the applicant regards as his invention.

Art Unit: 2134

Claims 1-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In light of Applicant's arguments, it is uncertain what Applicant means when the term "physical connection" is recited.

Applicant argues the following with respect to why a WWN indicates nothing about the physical connection of a device(page 28, paragraph 3):

"However, the WWN is a device specific identifier that is independent of the location of the device on the network. That is, the WWN indicates nothing about the physical connection of the device and, therefore, is insufficient to validate a physical connection."

In one instance it is suggested that Applicant makes the determination of physical connection through ports. For Example, page 3, 2nd paragraph of the specification states:

"The method includes acts of: (a) in response to one of the plurality of devices attempting to login to the network and representing itself to the network as a first device, determining whether the one of the plurality of devices is attempting to login to the network through a port that is different than a first port of the network through which the first device previously logged into the network."

Art Unit: 2134

Such an instance would suggest that by physical connection, the Applicant means differences in port.

However, from Applicant's arguments it appears that Applicant desires the Examiner to interpret a physical connection as having a characteristic which takes into account the location of the device on the network. However, the Examiner contends that differences in location has no correlation with a port that is used to connect to a network.

However, the Applicant has apparently viewed the location of a device on a network as being significant to Applicant's interpretation of a physical connection as (page 28, paragraph 3) of the arguments recites. The Examiner believes such an interpretation is inconsistent with Applicant's previous interpretation of "physical connection" as implied by the specification, which would suggest the use of WWNs, or port values.

It is uncertain now what Applicant means by the term "physical connection" or "differences in physical connection". *At least four* different interpretations are now possible:

(1) Does Applicant mean that the actual physical wire for transmission between two computers is different than the first connection? For example, a switch between two computers first uses a coaxial cable, but now employs the usage of a fibre optic cable. Such a change is certainly a difference with the first physical connection.

- (2) Does Applicant mean that different ports are used than previously? (implied by specification page 3, 2nd paragraph)
- (3) Does Applicant mean that the communicating entities employ different hardware that which was previously used? If one party makes a connection with Modem A with serial number X, but now has the exact same network location, but employs Model B with serial number Y, does such a change result in a different physical connection? The Applicant has obviously deemed the location of the device on the network as significant to the same "physical connection" as indicated by the crux of Applicant's arguments: However, the WWN is a device specific identifier that is independent of the location of the device on the network. That is, the WWN indicates nothing about the physical connection of the device and, therefore, is insufficient to validate a physical connection. (page 28, paragraph 3) of Arguments.

Yet it is evident that the physical connection is now different than the previous as the transmitting entities are not the same, and as such the same physical connection is not and cannot be established.

(4) Does Applicant mean that at least one of the entities involved in the communication is now located at a *different location on the network*? With respect to the TCP/IP protocol, such a change would be implied with just a mere switching of the IP address. The Examiner contends this is **NOT a physical connection**. This is a purely logical connection that may be established without any physical means whatsoever.

All of these interpretations are reasonable interpretations that may be construed by one of ordinary skill in the art.

It is worthy to note that the first interpretation would lose meaning when the connections are made using wireless connections. There would be no "physical" connection to compare.

It is worthy to note that the second interpretation is not actually a physical connection. At best a difference in port is merely one unit of a connection as understood by those skilled in the art with respect to the TCP/IP. Furthermore, two entities may communicate using different ports, but still be using the same connection, as it is understood that a TCP/IP connection as a whole uses some 65 thousand ports per connection. Such an interpretation would then necessitate an exact interpretation of the word "connection."

It is worthy to note that the third interpretation would allow a change in the physical connection to be detected using WWNs as WWNs indicate a unique hardware number with respect to the actual given hardware and would is consistent with the Examiner's interpretation of detecting changes in the physical connection.

It is worthy to note that the fourth interpretation is not actually a physical connection either, and that a difference in network location is a completely "logical" interpretation of a connection and has no meaning in the physical world. For example, a computer A

Art Unit: 2134

connecting with Computer B may have on network location (ex. 234.123.213.68) in one instance, and have another network address (ex. 234.123.213.69) in another instance.

This is known in the art as a dynamically assigned IP address. The physical connection and hardware used is irrelevant to the IP assigned.

The third interpretation was chosen by the Examiner because it appeared most reasonable and consistent with Applicant's disclose of the term "physical connection."

The Applicant has responded to the Examiner's arguments with an interpretation that is inconsistent with the definition of the term "physical connection" as implied by the specification, or is repugnant to the meaning of the term itself as readily understood in the art. Consequently, the Examiner has no recourse but the reject the claims as being indefinite.

Claim Rejections - 35 USC § 102

- 5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Application/Control Number: 09/748,053 Page 11

Art Unit: 2134

6. Claims 1- 66 are rejected under 35 U.S.C. 102(e) as being anticipated by Hubis et

al., US patent 6,343,324.

In reference to claim 1:

Hubis et al. (Column 11, lines 45-57) & (Figure 3b) & (Column 14, line 40 – Column 15,

line 52) discloses a method for use in a computer system including a plurality of devices,

a shared resource shared by the plurality of devices, and a network that couples the

plurality of devices to the shared resource, the method including acts of:

• In response to one of the plurality of devices attempting to access the shared

resource and representing itself to the shared resource as a first device,

determining whether the one of the plurality of devices is attempting to access the

shared resource through a physical connection through the network that is

different than a first physical connection through the network used by the first

device to access the shared resource, where the access path qualifier is determined

by the WWN (Column 15, lines 50-52) and comparing it with the table entries.

• When it is determined in the fact that one of the plurality of devices is attempting

to access the shared resource through a connection through the network that is

different than the first physical connection, denying the attempted access by the

one of the plurality of devices to the shared resource, when the access path is

found not to be the same, the new host will be denied access. (Column 12, lines

27-35)

In reference to claim 3:

Art Unit: 2134

Hubis et al. (Column 9, line 63 – Column 10, line 8) discloses the method of claim 1, wherein the network is a Fibre Channel fabric, wherein the one of the plurality of devices and the first device each has an assigned world wide name (WWN) and a fabric identifier(fabric ID), where the fabric ID is the fibre ID.

- Wherein the method further includes a step of storing the WWN and the fabric ID
 of the first device in response to an access by the first device to the shared
 resource (Column 9, line 63 Column 10, line 8)
- Wherein the act (a) is performed in response to an access, that occurs after the access by the first device, by the one of the plurality of devices to the shared resource, where the comparing is done by trying to access the logical volume (Column 12, lines 27-35) and includes acts of:
 - Examining a value of the WWN presented by the one of the plurality of devices to the shared resource to determine that the one of the plurality of devices is representing itself as being the first device, where the WWN is examined.
 - o Comparing a value of the fabric ID presented by the one of the plurality of devices to the stored fabric ID for the first device, where the fabric ID is the fiber ID and is used to verify the access path, also used to identify the host. (Column 10, lines 33-40) & (Column 9, line 63 Column 10, line 8)
 - O Determining that the one of the plurality of devices is attempting to access the shared resource through a physical connection through the network that is different than the first physical connection when the value of the fabric ID presented by the one of the plurality of devices mismatches the

Application/Control Number: 09/748,053 Page 13

Art Unit: 2134

stored fabric ID for the first device, where the fabric ID is the fiber ID which determines the access path is used by the access controller to check if its valid (Column 10, lines 37-40), and where the fiber ID is further compared against the stored fabric IDs in the WWN table entry. (Column 14, lines 13-22, lines 53-56)

In reference to claim 4:

Hubis et al. (Column 9, line 63 – Column 10, line 8) discloses the method of claim 1, wherein the network employs a protocol wherein the one of the plurality of devices and the first device each has a first identifier that uniquely identifies the device in a manner that is independent of a physical configuration of the computer system and a second identifier that uniquely identifies the device in a manner that is dependent upon the physical configuration of the computer system

- Wherein the method further includes a step of storing the first and second identifiers of the first device in response to an access by the first device to the shared resource. (Column 9, line 63 – Column 10, line 8)
- Wherein the act (a) is performed in response to an access, that occurs after the access by the first device, by the one of the plurality of devices to the shared resource, where the comparing is done by trying to access the logical volume (Column 12, lines 27-35) and includes acts of:
 - O Examining a value of the first identifier presented by the one of the plurality of devices to the shared resource to determine that the one of the

plurality of devices is representing itself to be the first device, where the WWN is examined.

- O Comparing a value of the second identifier presented by the one of the plurality of devices to the stored value of the second identifier for the first device, where the fabric ID is the fiber ID and is used to verify the access path, also used to identify the host. (Column 10, lines 33-40) & (Column 9, line 63 Column 10, line 8)
- o Determining that the one of the plurality of devices is attempting to access the shared resource through a physical connection through the network that is different than the first physical connection through the network that is different than the first physical connection when the value of the second identifier presented by the one of the plurality of devices mismatches the stored value of the second identifier for the first device, where the fabric ID is the fiber ID which determines the access path is used by the access controller to check if its valid (Column 10, lines 37-40), and where the fiber ID is further compared against the stored fabric IDs in the WWN table entry. (Column 14, lines 13-22, lines 53-56)

In reference to claim 6, 7, 8:

Hubis et al. (Figures 1 and Figures 2) discloses a process by the entire system that performs actions by the partially by storage system, outside the storage system, and a device disposed between the storage system and network.

In reference to claim 23:

Hubis et al. (Column 9, line 63 – Column 10, line 8) discloses a method for use in a computer system including a plurality of devices, a storage system shared by the plurality of devices, and a network that couples the plurality of devices to the storage system, wherein the network employs a protocol wherein each of the plurality of devices has a first identifier that uniquely identifies the devices in a manner that is independent of a physical configuration of the computer system and a second identifier that uniquely identifies the device in a manner that is dependent upon the physical configuration of the computer system, the method including acts of:

- In response to a login of a first device of the plurality of devices to the storage system, storing the first and second identifiers of the first device, where the values are stored upon accessing the fiber switch to allow access paths to be assigned.

 (Column 9, line 63 Column 10, line 8) & (Column 10, lines 30-40)
- In response to an attempt, subsequent to the act (a), by one of the plurality of devices to login to the storage system while representing itself to the storage system as the first device, determining whether the one of the plurality of devices is attempting to login to the storage system through a physical connection through the network that is different than a first physical connection through the network used by the first device to login to the storage system in the act(a), including acts of:

o (b1) examining a value of the first identifier presented by one of the plurality of devices to the storage system to determine that the one of the plurality of devices is representing itself to be the first device, where the WWN is examined.

Page 16

(b2) comparing a value of the second identifier presented by one of the plurality of devices to the stored value of the second identifier for the first device (Column 9, lines 50-57)

(b3) determining that the one of the plurality of devices is attempting to login to the storage system through a physical connection through the network that is different than the first physical connection when the value of the second identifier presented by the one of the plurality of the devices mismatches the stored value of the second identifier for the first device, where the physical connection is an access path. (Column 10, lines 33-40)

c) when it is determined in the act (b3) that the one of the plurality of devices is attempting to login to the storage system through a physical connection through the network that is different than the first physical connection, denying the attempted login by the one of the plurality of devices to the storage system, (Column 12, lines 4-35) & (Column 11, lines 45-57) where the host to controller port information is the access

Art Unit: 2134

path disclosed by the fiber ID, and accessed is denied if the WWN, LUN, and host-controller-port information don't match.

In reference to claim 24:

Hubis et al. discloses the method of claim 23, wherein the network is a Fibre Channel fabric, wherein the first identifier is a world wide name (WWN) and the second identifier is a fabric identifier(fabric ID);

- Wherein the act(a) includes an act of; in response to a login of first device to the storage system, storing the WWN and the fabric ID of the first device, where the values are stored when the device initially logs into the fabric in order to have an access path. (Column 9, line 63- Column 10, line 8)
- Wherein the act(b1) includes an act of examining a value of the WWN presented by the one of the plurality of devices to determine that one of the plurality of devices is representing itself to be the first device, where the WWN is examined for in the WWN table. (Column 14, lines 45-55)
- Wherein the act(b2) includes an act of comparing a value of the fabric ID presented by the one of the plurality of devices to the stored value of the fabric ID for the first device, where the fabric ID is compared in how it maps to the WWN table. (Column 14, lines 13-20, 45-55)
- Wherein the act(b3) includes an act of determining that the one of the plurality of devices is attempting to login to the storage system through a physical connection through the network that is different than the first physical connection when the

value of the fabric ID presented by the one of the plurality of devices mismatches the stored value of the fabric ID for the first device, (Column 12, lines 4-35) & (Column 11, lines 45-57) where the host to controller port information is the access path disclosed by the fiber ID, and accessed is denied if the WWN, LUN, and host-controller-port information don't match.

Page 18

In reference to claim 27:

Hubis et al. discloses a method for use in a computer system including a network and plurality of devices coupled to the network, the network employing a protocol wherein each of the plurality of devices has a first identifier that uniquely identifies the device in a manner that is independent of a physical configuration of the computer system and a second identifier that uniquely identifies the device in a manner that is dependent upon the physical configuration of the computer system, the network including at least one network component that assigns a unique value for the second identifier to each of the plurality of devices that is logged into the network, the method including acts of:

- a) in response to one of the plurality of devices attempting to login to the network and representing itself to the network as a first device, determining whether the one of the plurality of devices is attempting to login to the network through a port that is different than a first port of the network through which the first device previously logged into the network, where the host-to-controller port or the access path is determined by the fiber ID comparison. (Column 10, lines 33-40)
- when it is determined in the act (a) that the one of the plurality of devices is attempting to access the network through a port that is different than the first port,

Art Unit: 2134

denying the attempted login by the one of the plurality of devices to the network, (Column 12, lines 4-35) & (Column 11, lines 45-57) where the host to controller port information is the access path disclosed by the fiber ID, and accessed is denied if the WWN, LUN, and host-controller-port information don't match.

In reference to claim 29:

Hubis et al. (Column 11, lines 45-58) discloses the method of claim 27, further including an act of preventing at least one of the plurality of devices from transmitting information through the network while representing itself with a value for the second identifier that differs from its value assigned by the at least one network component, where the information is prevented from being transmitted by the logon to the volume being denied.

In reference to claim 61:

Hubis et al. discloses the apparatus of claim 57, wherein the at least one controller includes:

- Means, responsive to the login of a first device of the plurality of devices to the storage system, to store the first and second identifiers of the first device in the storage device, where the fiber channel ID, the LUN, and the WWN are stored upon accessing the fiber switch to allow access paths to be assigned. (Column 9, line 63 Column 10, line 8) & (Column 10, lines 30-40)
- Means, responsive to an attempt, after the login by the first device, by one of the plurality of devices to login to the storage system, while representing itself to the storage system as the first device, for examining a value of the first identifier

Art Unit: 2134

presented by the one of the plurality of devices to the storage system to determine that the one of the plurality of devices is representing itself to be the first device and for comparing a value of the second identifier presented by the one of the plurality of devices to the stored value of the second identifier for the first device, where the first and second identifiers are the fiber ID and the WWN which are both compared for. The WWN is compared for in the table. (Column 11, lines 45-57) The fiber ID is used to determine the access path and is used to make a determination of the physical route (Column 10, lines 33-40) while also being compared for later in the WWN table. (Column 14, lines 50-55)

- Means for determining that the one of the plurality of devices is attempting to access the storage system through a physical connection used by the first device in logging into the storage system when the value of the second identifier presented by the one of the plurality of devices mismatches the stored value of the second identifier for the first device, where an attempt is made to match the WWN, LUN, and host-to-controller/access path/fiber ID when a request is made to access the logical volume. (Column 11, lines 45-57)
- Means for denying the attempted login by the one of the plurality of devices to the storage system when it is determined that the one of the plurality of devices is attempting to login to the storage system through a physical connection through the network that is different than the first physical connection, (Column 12, lines 4-35) & (Column 11, lines 45-57) where the host to controller port information is the access path disclosed by the fiber ID, and accessed is denied if the WWN, LUN, and host-controller-port information don't match.

In reference to claim 62:

Hubis et al. discloses an apparatus for use in a computer system including a network and a plurality of devices coupled to the network, the network employing a protocol wherein each of the plurality of devices has a first identifier that uniquely identifies the device in a manner that is independent of a physical configuration of the computer system and a second identifier that uniquely identifies the device in a manner that is dependent upon the physical configuration of the computer system, (Column 9, line 62 –Column 10, line 8)

the network including at least one network component that assigns a unique value for the second identifier to each of the plurality of devices that is logged into the network, the apparatus comprising, where the second identifier is the fiber ID (Column 9, line 62 – Column 10, line 8):

- At least one input to be coupled to at least one of the plurality of devices, where the input is the access request. (Column 12, lines 28-31)
- At least one controller that is responsive to one of the plurality of devices attempting to login to the network and representing itself to the network as a first device, to determine whether the one of the plurality of devices is attempting to login to the network through a port that is different than a first port of the network through which the first device previously logged into the network, and to deny the attempted login by the one of the plurality of devices to the network when the one of the plurality of devices is attempting to login to the network through a port that is different than the first port. (Column 12, lines 28-35) & (Column 11, lines 45-

57) where the host to controller port information is the access path disclosed by the fiber ID.

In reference to claim 63:

Hubis et al. discloses (Column 12, lines 25-35) discloses the apparatus of claim 62, in combination with a network switch to form at least a portion of the network, wherein the at least one controller is disposed within the switch, where the controller is the array access controller (Item 104 of Figure 1) and is clearly disposed within the Fabric of switches in Figure 2a.

Claims 2,5,10,14, 17, 20, 28, 32, 33, 36, 41, 45, 48, 51, 54, 55, 56 are substantially similar to claim 1 and are rejected for the same reasons.

Claims 9, 30, 34, 40, 58, 65 are substantially similar to claim 3 and are rejected for the same reasons.

Claims 13, 31, 35, 44, 66 are substantially similar to claim 4 and are rejected for the same reasons.

Claims 11, 15, 18, 21, 25, 37, 42, 46, 49, 52, 59 are substantially similar to claim 6 and are rejected for the same reasons.

Page 23

Art Unit: 2134

Application/Control Number: 09/748,053

Claim 38 is substantially similar to claim 7 and is rejected for the same reasons.

Claims 12, 16, 19, 22, 26, 39, 43, 47, 50, 60 are substantially similar to claim 8 and are rejected for the same reasons.

Claim 57 is substantially similar to claim 23 and is rejected for the same reasons

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of the final action and the advisory action is not mailed under after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension pursuant to 37 CFR 1.136(A) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication from the examiner should be directed 7. to Thomas M Ho whose telephone number is (571)272-3835. The examiner can normally

be reached on M-F from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (571)272-3838.

The Examiner may also be reached through email through Thomas.Ho6@uspto.gov

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

General Information/Receptionist

Telephone: 571-272-2100

Fax: 703-872-9306

Customer Service Representative

Telephone: 571-272-2100

Fax: 703-872-9306

TMH

May 21st, 2005

GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100